M. O. M. JAN. 1984

NEWSLETTER

MICRO OF MONMOUTH

VOL.3 ISSUE 1

FEB. MEETINGS

MONDAY FEB. 6

8:00 PM
MANALAPAN H.S. RM. C104-108

UTILITY DEMO

GAME DEMO

BUSINESS DEMO

MONDAY FEB. 20

8:00 PM
MANALAPAN H.S. RM. C104-108

UTILITY DEMO

GAME DEMO

BUSINESS DEMO

WHO'S WHO.

PRESIDENT-Frank Fezza, 201-446-4027

VICE PRES-Irwin Kaplan, 201-566-3335

SECRETARY-Marv Midlarsky, 201-780-2721

TREASURER-John Callaghan, 201-244-4404

PROG.CHAIR-Joe Petrillo, 201-338-8014

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EDITOR-Barry Joseph, 201-536-1932

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EDITORS MESSAGE

SEND ARTICLES TO:

Barry Joseph
10 Sherwood Road
Manalapan New Jersey 07726

M.O.M.
Micro of Monmouth
The Newsletter of the Computer Club of Monmouth,Inc.

Barry Joseph
10 Sherwood Road
Englishtown, N.J. 07726

The Computer Club of Monmouth is a non-profit organization of ATARI Computer Enthusiasts who share a common interest in exchanging information on the programming and operation of the ATARI microcomputer system. The club meets at the Manalapan High School at 8 o'clock on the 1st and 3rd Mondays of each month. The meeting dates are changed or cancelled when a holiday or foul weather causes the school to be closed.

Neither the M.O.M. newsletter or The Computer Club of Monmouth,Inc. is affiliated with ATARI,Inc., Warner Communications or any of their subsidiary companies. All use of the word "ATARI", their model numbers or the Fuji logo, on or between the pages of the M.O.M. newsletter are to be referenced as trademarks of ATARI,Inc.

The M.O.M. newsletter solicits from its members reviews, news, articles, orginial programs, classified ads, and any other material of interest for publication. Any material submitted for publication should be given to the editor at the meetings or have it mailed in.

The material in the M.O.M. newsletter may be freely copied. We request that credit be given to its authors and to M.O.M. This newsletter is sent to paid members of The Computer Club of Monmouth,Inc. and to other users groups on an exchange basis.

Classified ads are free to the members of The Computer Club of Monmouth, Inc.

ATARI COMPUTER
ENTHUSIASTS

PRESIDENT'S MESSAGE

As we begin the New Year, let us review the events of the past year dealing with M.O.M. and Atari. In general, things look much better now than they did six months ago for both organizations. Your Atari club, M.O.M., has shown significant improvement in a number of areas:

- New members have joined M.O.M. and old members have returned to the fold.
- The Executive Committee has established contact with Atari, Inc., other user groups and interested vendors. They know we exist and are willing to participate in enterprises of mutual benefit.
- Our treasury is solvent and we have acquired an Atari 800 computer and color T.V.
- Our disk library is vastly improved and our tape library is much friendlier to the novice.

Of course, it would be a mistake to relax our resolve to improve M.O.M. We need to continue to look for ways to be successful, lest we stagnate from comfortable mediocrity.
For one thing, we need to provide to each other the motivation to make meaningful contributions to M.O.M in terms of creativity, knowledge and effort. The motivation I am talking about is precisely the kind which is demonstrated when one member agrees to review the disk library and weed out program bugs, or another member teach the BASIC course, or another to distribute flyers to software stores. We need to bring each and every member into this "circle of motivation"; and, perhaps, this should be the top priority goal of 1984.
I am also happy to report that the New Year brings signs of cautious optimism vis-a-vis ATARI, Inc. While the early part of 1983 was marked by bad judgment calls which allowed Commodore to gobble up the marketplace; the latter part of the year was marked by quiet re-direction. If they can bring out their new line of computers in a timely manner, the public perception of the machine will be greatly improved.
In the meantime, it is up to us to show the would-be computer user that the Atari computer is so superior to the competition in design, versatility and engineering that it will continue to remain a state-of-the-art machine for the foreseeable future.

MINUTES for 12/05/83

By Marvin Midlarsky

The club purchased a new 13" color T.V. set to serve as a monitor.

Scott Brause, using a 1200XL, demonstrated character graphics. He also showed a DOS modification that will allow DOS to work on double density drives.

Joe Petrillo demonstrated ULTIMA II which is an adventure game.

Jim Krutzler announced that the utility and demo disk we recently received from Atari is available as a loaner. He also announced the availability of two new club disks, 26 and 27.

MINUTES for 12/19/83

Club president Frank Fezza urged all members to write Consumers Report and complain about its poor presentation of the Atari computer in a recent issue.

Mark Chasin demonstrated the 800XL which comes with 64K and Basic. He used it to show us a new game called PHEONIX LAIR.

Bob Martin, author of BASIC COMMANDER, demonstrated a new language called FORTH.

SELL—OR—SWAP

* * * * * * * * * * * * *

Barry Joseph EVE-536-1932 Atari MAILING LIST tape Used PRICE $5.00	Barry Joseph EVE-536-1932 APX FAMILY CASH FLOW NEW PRICE $15.00	Barry Joseph EVE- 536-1932 Atari 16k RAM NEW $25.00 (from AT400)	Barry Joseph EVE-536-1932 APX VIDEO MATH CARDS NEW PRICE $10.00
Ken Kelly EVE-431-1010 At400w/32k,record,keybd Used PRICE $200.00	Michael Carovilanno EVE-364-3734 Touch Typing USED PRICE $12.00	Michael Carovillano EVE-364-3734 Atari Inv. to Prog III USED PRICE $12.00	Alan Schwenk EVE-493-8520 Centr.101 pnt.CAPS only USED PRICE $275.00
Ken Kelly EVE-431-1010 Advn.special add.set Used PRICE $200.00	Michael Carovilanno EVE-364-3734 Graph It USED PRICE $9.00		

LIBRARY REPORT

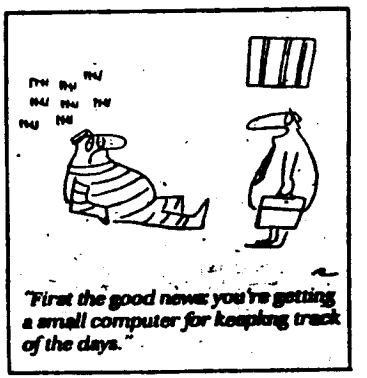
by
JIM KRUTZLER

The two new disks, #26 and #27, are now in the M.O.M. Library and in the computers of some members. There is something for everyone on them and should be alot of fun and enjoyment for all. Disks #28 and #29 are now in the works but still need some good programs to fill them up. The Library presently contains 27 disks which are free to the membership with a blank disk exchange. The majority of the programs are of the game, demo and utility type. What the Library needs are programs of the education, business, data storage and filing,etc. type.

As an example, I am presently building a "MODEM DISK" that will contain the known terminal routines that are used to access bulletin boards. Please see me if you have any of these and would like to donate them to the Library. Another idea is for someone to contact the fig-FORTH group for their two free disks on FORTH. I'm sure there are members who would like to learn about this language.

Appendix C of the ATARI Basic Reference Manual has many of the character sets unprinted. I wrote a short program that will show you what these characters look like.

```
100 GRAPHICS 0:POKE 752,1
110 PRINT:PRINT "ATASCII CHARACTER SET"
120 PRINT "ON GRAPHICS MODE ZERO"
130  POSITION  4,9:PRINT  "CHARCTER   SET":POSITION   21,9:PRINT
"DECIMAL CODE"
140 FOR A=0 TO 255:IF A=125 THEN 210
145 REM LEAVE OUT 125 (CLR) SO THAT IT DOESN'T CLEAR THE SCREEN
150 COLOR A
160 FOR WAIT=0 TO 500:NEXT WAIT
170 FOR I=5 TO 8
180 PLOT 1,I:DRAWTO 19,I
190 NEXT I:PLOT 19,8
200 PRINT ,,,,A
210 NEXT A
220 GOTO 220
```



TM RFD 011
007 0062 003

19 APRIL 1983

TECHNICAL MEMO

SUBJECT: Diskettes Formatted by LJK Letter Perfect

Some time in late 1982, LJK Enterprises released a newer version of Letter Perfect which included the ability to use an 80 column video display board. When the version was released, it was found that diskettes which were formatted on a PERCOM floppy disk drive were unable to be used for data storage with that program.

This anomaly was caused by differences in the format pattern used by PERCOM and that used by Atari. When a diskette is formatted, magnetic particles are arranged in a fashion that will allow data to be stored on that diskette. each sector of the disk must contain some data, and Atari elected to put zeroes in each sector. The problem with this, is that the magnetic particles all lay flat, which prohibits a thorough testing of the media. PERCOM uses a bit pattern of 'E5' on each sector of the disk.

This 'E5' bit pattern normally poses no difficulty to disk I/O, but Letter Perfect expects most of the directory to be filled with zeroes, and detects the data bit pattern as a full directory, which renders that diskette useless.

INSTRUCTIONS FOR USING
PERCOM DATA'S LETTER PERFECT FORMAT UTILITY

PERCOM DATA has prepared a program, which is written in BASIC, that zeroes out the directory, and puts other pertinent information in that directory. Use this program to format a disk that is to be used with Letter Perfect.

Use of this program is simple and straightforward. Run the program by first booting a single density Atari DOS diskette, place your LJK format diskette in drive 1, and from BASIC, type in:

RUN "D"LJKFMT"

The program's prompting begins:

INSERT BLANK DISK.
PRESS RETURN WHEN READY?

Follow the instructions, and after pressing <RETURN> you will be prompted:

FORMAT DISK?

If you wish to format a new disk type 'Y'. If you have a diskette already formatted in single density, you can type 'N'. If you type 'Y', the diskette will be formatted, and then directory modified to make Letter Perfect happy.

If you type 'N', the program will assume that the diskette is already formatted, and will simply modify the directory. This is a faster selection, if you have a diskette already formatted that you wish to use.

This program is in the public domain, and you may do with it as you please. We only ask that credit be given where credit is due.

Should you not wish to type in the program, it is available on the PERCOM Bulletin Board at 1-214-340-9226 in the Upload/Download Database. The Board is operational on evenings and weekends.

No further support for this program is anticipated. If you wish a program with more bells and whistles, then contact LJK Enterprises for a diskette of several useful utilities, including one similar to this.

```
10 REM ********************************
20 REM *** LETTER PERFECT FORMAT ***
30 REM ***                       ***
40 REM *** SUPPLIED BY:          ***
50 REM ***   PERCOM DATA CORP.   ***
60 REM ***                       ***
70 REM *** FOR THE PUBLIC DOMAIN ***
80 REM ***                       ***
90 REM ***     19 APR. 1983      ***
100 REM ********************************
110 GOSUB 10000:REM INITIALIZE
120 ? :? :?
150 ? "INSERT BLANK DISK."
160 ? "PRESS RETURN WHEN READY ";
170 INPUT R$
180 GOSUB 11000:REM FORMAT DISK
190 GOSUB 12000:REM ZERO DISK
200 GOSUB 13000:REM BUILD DIRECTORY
210 END
10000 REM ****************************
10005 REM INITIALIZE & DIM VARIABLES
10010 DIM BUF$(128):REM BUFFER
10015 B=ADR(BUF$)
10020 DIM R$(1):REM INPUT BUFFER
10030 SIO=ADR("1234"):REM USER CODE
10040 DCB=768:REM SIO DCB
10050 FOR I=0 TO 3:REM SET UP SIO
10060 READ X
10070 POKE SIO+I,X
10080 NEXT I
10090 FOR I=0 TO 11:REM SET UP DCB
10100 READ X
10110 POKE DCB+I,X
10120 NEXT I
10125 REM SET UP BUFFER ADDRESS
10130 POKE DCB+5,INT(B/256)
10140 POKE DCB+4,B-INT(B/256)*256
10999 RETURN
11000 REM ****************************
11010 REM FORMAT DISK
11020 ? :? :? "FORMAT DISK";
11030 INPUT R$
11040 IF R$="N" THEN RETURN
11045 IF R$<>"Y" THEN 11020
11050 POKE DCB+2,ASC("!"):REM COMMAND
11060 POKE DCB+3,64:REM DIRECTION
11070 POKE DCB+6,120:REM SET TIMEOUT
11080 REM FIX TIMEOUT
11999 RETURN
12000 REM ****************************
12010 REM ZERO SECTORS
12020 FOR I=0 TO 127:REM ZERO BUFFER
12030 POKE B+I,0
```

```
12040 NEXT I
12050 FOR I=359 TO 375:REM ZERO SECTORS
12060 POKE DCB+2,ASC("W"):REM COMMAND
12070 POKE DCB+3,128:REM DIRECTION
12074 POKE DCB+11,INT(I/256)
12076 POKE DCB+10,I-INT(I/256)*256
12080 PRINT I,
12090 X=USR(SIO)
12100 PRINT PEEK(DCB+3)
12110 NEXT I
12999 RETURN
13000 REM ****************************
13010 REM BUILD LJK LETTER PERFECT
13020 REM DIRECTORY
13030 RESTORE 32000:REM GET DIR. DATA
13040 FOR I=0 TO 127
13050 READ X
13060 POKE B+I,X
13070 NEXT I
13080 POKE DCB+11,1:REM SECTOR 16A
13090 POKE DCB+10,106
13000 POKE DCB+2,ASC("W")
13110 POKE DCB+3,128:REM DIRECTION
13120 X=USR(SIO)
13999 RETURN
30000 REM ****************************
30005 REM *** SIO USER FUNCITON CODE
30010 DATA 104,76,89,228
30020 REM *** DCB INITIAL DATA
30030 REM DEV,UNIT,CMND,STATUS,BUFF
30040 DATA 49,   1,  87,    64, 0,0
30050 REM TIMEOUT,LENGTH,SECTOR
30060 DATA 1,0, 128,0,   0,0
30070 REM ****************************
32000 REM *** DIRECTORY DATA
32010 DATA 2,196,2,196,2,0,0,0
32020 DATA 0,0,63,0,0,0,0,0
32030 DATA 0,255,255,255,255,255,255,255
32040 DATA 255,255,255,255,255,255,255,255
32050 DATA 255,255,255,255,255,255,255,255
32060 DATA 255,255,255,255,255,255,255,255
32070 DATA 255,255,255,255,255,255,255,255
32080 DATA 63,255,255,255,255,255,255,255
32090 DATA 255,255,255,255,255,255,255,255
32100 DATA 255,255,255,255,255,255,255,255
32110 DATA 255,255,255,255,255,255,255,255
32120 DATA 255,255,255,255,255,255,255,255
32130 DATA 255,255,255,255,0,0,0,0
32140 DATA 0,0,0,0,0,0,0,0
32150 DATA 0,0,0,0,0,0,0,0
32160 DATA 0,0,0,0,0,0,0,0
```

6502B MICROPROCESSOR MINI-TUTORIAL

Review

- Concept of a byte (memory location)
- Number of bytes (64k); 48k of which is RAM
- Certain memory locations constitute the locations of ANTIC, GTIA, POKEY and PIA chips.
- These special addresses are called "hardware registers" because each of them has a specific effect upon the ATARI itself.

The 6502 microprocessor consists of several critical registers:

- The **accumulator or A-register** is the main register (memory location) in the computer. Practically all program instructions use the accumulator. Consider the accumulator a "funneling point". Putting a value in a memory location involves first putting the value in the accumulator; then moving it from the accumulator to the required memory address.
Moving a value from one memory address to another requires to first move it from the first address to the accumulator; then from the accumulator to the second address.

Two very powerful assembly language instructions involving the accumulator are:

LDA - Load the Accumulator(with a given value)
STA - Store the value in the accumulator

- The next important memory location in the 6502 is called the **status register or P-register.**
The status register gives information about the result of the last instruction executed. in fact it provides 7 kinds of information which we will discuss in a future tutorial.

- There are two **index registers- the X-register, and the Y-register.**
They can be used to store intermediate results of operations.

- The **stack pointer or SP-register** is used by the computer to store certain vital information.

- Finally, the **PROGRAM COUNTER or PC-register** is a special register that contains the address of the next instruction to be executed. The Atari checks this location to get the address of the next sequential instruction.

COMPUTER PARADE

by
Irwin Kaplan

COMMODORE.....Commodore plans to debut a new home computer with built-in word processing and spreadsheet applications at the January Consumer Electronics Show. Dubbed the 444, this is the first of four new computers planned by Commodre. These new machineswill share a common operating system which is different from the VIC-20 and Commodre 64. No retail price has been set yet but this unit should be comparably priced with the Adam, about $800.....APPLE has a new portable forthcoming, IIe compatible,128K,6502 processor, and half-high single sided,143k disk drive...Look for Apple to drop the price on its current IIe home package down from $1400 to $1000. It must be getting harder to sell the IIe with IBM and Coleco in the picture...Retailers would like to see Apple introduce a product for the home market around the $400 price range. At that price there would be a big attraction for the mass market.....IBM..It finally happened. There is a critic who is going public denouncing IBM's marketing . The movement is called I-B-M-U-GO and it's spokeman is The Shadow. The organizations aim,in part, is to "stop IBM from foisting a lot of 8088 junk on the unspecting world". This anti-IBM group is mailing letters to the press and expects to attract support. Blasphemy!...And if that wasn't enough, it was reported IBM issued a warning to its dealers to check for possible power-supply problems in a certain batch of XTs.Ho hum .....

ATARI NEWS
Atari's latest plan to aid and build sales is called Atari Adventure - a shopping mall arcade/computer center. These mall sites are to be near mass merchandisers that carry Atari merchandise, and are supposed to encourage shoppers to purchase hardware and softwear immediately at a nearby store ???I suppose that this is another attempt to reach the home market. While it is nice to see something happening, is home computer hardware an impulse item ???.....Persistent rumors that the 1400's will not be produced. I hope that this is not true. There is limited upward mobility for Atari owners and delays or rumored delays can't be good for the Company. Atari say something !

THE HAPPY ENHANCEMENT FOR THE ATARI 810

HAPPY COMPUTING
P.O. Box 32331
San Jose, California 95152
$169.00 to $249.95
by Joseph C. Petrillo

By this time anyone who owns an Atari has at one time or another heard about the HAPPY ENHANCEMENT for the 810 disk drive, AKA the Happy Chip. Well I have had one in my drive since June of this year and I can truly see why it has been dubbed the Happy Chip. In the event that one of the readers of this article might not be familiar with this piece of equitment I will begin by discribing it as a drive modification which allows your 810 drive to read tracks as opposed to reading sectors. At this point you might say "$200.00 to change how your drive reads a program is a lot of money." Well before reaching this conclusion read on.

In the standard Atari 810 drive the user will request the run of a program at which time the drive controller seeks out the first sector of the desired program. After locating this sector it is read into a 128-byte disk buffer, checked and sent to the Atari. After this sector is checked and sent the drive seeks out the next sector, positions the read-write head over that track, waits for the second sector to pass over it at which time the same sequence of events occur, and so on and so on. Well the Happy Enhancement begins by requiring the user to install in his or her drive a 4K disk buffer which allows the contents of one entire track (18 sectors @ 128 bytes per sector = 2304 bytes) to be read and stored in the drive. This greatly reduces the read time for any program. In addition to this it greatly reduces unnecessary mechanical wear and tear on the drive as the head does not move needlessly back and forth seeking out sectors. If you use your drive as much as I do mine you can begin to see the advantages to this system vs. the original Atari system. The board consists of several chips mounted on a P.C. board which with a minimum of mechanical intellance anyone can install. As stated prior this board replaces the original controller assembly in the drive. The documentation which accompanies the board is very good and is well presented. It took me approximately 45 minutes to install the board from begining to end. It requires no soldering, simply replacing a couple of ICs.

After assembling the modification you are ready to begin using it. At the time I purchased my Happy there were about four or five programs which were available to use with the modification. When I say "use with modification" I am speaking of it's ability to back up your existing programs. Three of the programs that come to mind are Happy Backup, Happy Compactor, and another program which allows the user to design custom formatting. The Happy Enhancement comes with a Happy Backup program which is guaranteed to back any program you currently own. If you have a problem in doing this they request you send the original program to them at which time a revision will be constructed and added to the Happy Backup. If the company is unable to do this they will refund your money for the Happy Enhancement if you wish. The most current version of Happy Backup is version 4.0 which has a special recovery menu which allows you to change several parameters prior to backing up a program. Due to the potential for abuse the backup feature is not brought to the forefront but quite honsetly if you have ever paid $50.00+ for a program and for some reason it bombs out on you, think how great it would feel to have a back up in file as opposed to sending the original back to the manufacturer with a check for another copy. Below are several comparisons between the standard 810 and a Happy equipted 810:

Booting standard DOS/DUP SYS.	
With B ROM	18 seconds
With C ROM	16 seconds
With B or C ROM with Happy	14 seconds
Disk Formatting	
Without Happy	38 Seconds
with Happy	25 seconds

Recently Happy Computing, the manufacturer of Happy Enhancemant, has released a new line of products known as "Warp Speed DOS" as well as several other "Warp Speed" programs. This is truly amazing to use. All Atari users are quite familiar with the beeping as a program loads from the drive into RAM. Well the Happy Enhancement increases the speed of these beeps. Happy Warp Speed DOS transforms this beep to a buzz. The time required to boot up DOS/DUP SYS. with Warp DOS is approximately 9 seconds. Once booted loading programs is much quicker than ever before. I proceeded to test this by searching my library listing of 352 records using the standard speed, Happy Enhanced, and Warp DOS with the following results:

Standard 810 Speed	55 seconds
Happy Enhanced	39 seconds
Warp Speed DOS	32 seconds

In conclusion I would like to say that the initial investment of approximately $200.00 for the Happy Enhancement is well worth it in [illegible] and saving wear and tear on your precious drive. We are planning a demonstration of the Happy Enhancement at a [illegible] which your Newsletter.

**** ATTENTION ****

AS YOU KNOW, OUR CLUB HAS USE OF THE ROOM IN MANALAPAN HIGH SCHOOL AT THE GENEROSITY OF THE ADULT EDUCATION PROGRAM. THEY NOW NEED A TEACHER FOR 8 WEEKS, BEGINNING MARCH 10, 1984, TO TEACH BASIC LANGUAGE, SATURDAY MORNINGS, AT FREEHOLD TOWNSHIP HIGH SCHOOL. THE COURSE WILL BE GIVEN SATURDAY MORNINGS. THIS IS A PAID POSITION, USING APPLE II+ COMPUTERS. IF YOU ARE QUALIFIED AND INTERESTED, PLEASE CONTACT MR. IRWIN KOTKIN, AT 201-431-8460.

****

DUES ARE DUE

Well it's that time of the year again when you do all your shopping and get all those presents for your loved ones. How often have you wondered "I wonder if he'll like this tie?" Well when it comes to yourself, you know what you like and from our meetings you appear to like MOM. Dues for 1984 are due by January 31, 1983. You will find a renewal application in your December newsletter. Just fill it out and either hand deliver it or mail it to John Callaghan, 10D Hemlock St., Toms River, N.J. 08757 along with a check for $18.00. This will insure that you will remain a member in good standing and entitled to all the benefits of an active member of MOM. We plan a big year ahead with tutorials, demos, specials and much much more. Remember this is your club,help us make it even better than it is, re-up now and avoid the rush. We hope you have enjoyed the past year and look foward to an even more exciting new year. See you at the next meeting.

Joe Petrillo
Prg. Director

==========

MOMS LOGO CONTEST

The deadline for the MOM logo has been extended to January 31, 1983 in light of the fact only three entries have been received but none of them submitted on the correct format. Remember that all entries must be submitted to an officer of the club on 8 1/2 x 11 paper or poster board in either black and white or color. The winner will be determined at the next executive board meeting and announced at the February meeting. Remember the prize for the best logo submitted is a box of Elephant disks and his or her choice of a club library disk. If you have any questions concerning the contest please contact me at (201) 338-8014. Good luck and may the best member win!

Joe Petrillo
Prg. Director

MEMBERSHIP APPLICATION

The Computer Club of Monmouth,Inc.

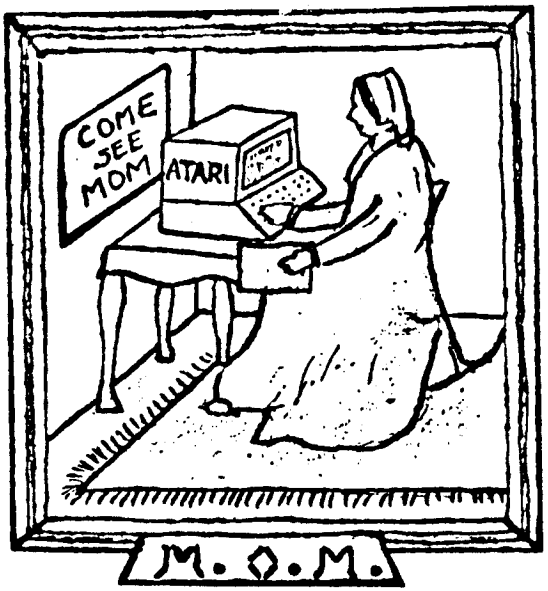
(Dues are $18.00/year/individual or family)

Name_____ Phone_____
Street_____
City_____ State_____ Zip Code_____
Hardware Owned_____
System Use (games,programming etc.)_____
I can help with_____

Send To: M.O.M.
c/o John Callaghan
10D Hemlock St.
Toms River, N.J. 08757

CLUB LIBRARY SUBMISSION FORM

The M.O.M. Diskette Library has become a vital link between the membership as a means of exchanging programs and utilities. This makes learning about the ATARI an easy and enjoyable experience. The Library is seeking your input in the way of programs and utilities. We are asking that M.O.M. members, at least once a year, submit a disk with a program on it which is in the "public domain" along with a short description on what the program does and how to use it. The first few lines of the program should contain REM statements giving credit to its source. In this way we can all profit in the knowledge and enjoyment of our computing hobby.



Micro of Monmouth
The Newsletter of the Computer Club of Monmouth, Inc.

Barry Joseph
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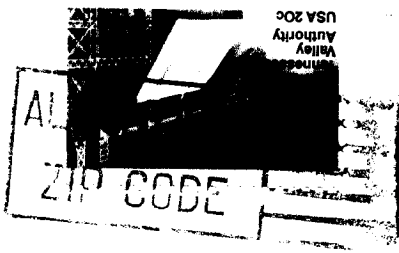

FIRST CLASS